Improved Position and Azimuth Determining System

Description

The M111 Improved Position and Azimuth Determining System (IPADS) is a High Mobility Multipurpose Wheeled Vehicle (HMMWV)-mounted, inertial navigation surveying system, which will be used by artillery survey parties as a secure, all-weather, day-night means for rapidly extending survey control to satisfy the demands of mobile weapons systems. IPADS, which does not rely on Global Positioning System (GPS), accurately aligns GPS-aided, self-locating firing elements on a common survey grid, enabling these firing elements to mass fires. IPADS will provide a highly mobile and accurate means of performing artillery survey. IPADS will determine location coordinates, altitude in meters, direction in millimeters, and will be capable of rapid and accurate self-alignment utilizing ring-laser gyros and accelerometers. The IPADS will replace the currently fielded AN/USQ-70 Position and Azimuth Determining System (PADS) in all Marine Corps artillery units.

Operational Impact

IPADS supports modernization of field artillery survey capabilities by replacing the obsolescent PADS that was fielded in the 1980s. The availability of PADS hardware and components is becoming increasingly problematic and will likely be unavailable as early as the FY 05-FY 06 timeframe.

Program Status

IPADS is an Army-led, joint-interest program. IPADS is in the post-Milestone C phase. Operational testing was completed in the second quarter FY 04. The Marine Corps IPADS schedule requires a procurement decision during second quarter FY 05.

Procurement Profile: FY 05 FY 06 **Quantity:** 50 5

Developer/Manufacturer:

L3 Communications, Budd Lake, NJ